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the shape molded backing member 112. It is contemplated that the sideward projection will be between 1 half inch and 3 inches.

FIGS. 15 and 16 are side views taken from various sides of the insulated siding member 110. The view in FIG. 15 is a cross sectional cut through a central portion of the insulated siding member 110. As can be seen in that figure, the indent 150 will have a thickness that approximated the thickness of the inward curve, with the thickness of the backing member varying to accommodate and approximate the contour of the various slats in the insulated siding member.

The insulated siding panels 110 are configured to mate in side-to-side abutting relationship as depicted in the FIGS. 17 through 21. An insulated siding panel is configured so that the projection portion of one insulated siding panel 110 is received into that detent 128 formed in a mating insulated siding panel to form a continuous siding surface as depicted in FIG. 17. It can be appreciated that the seam 154 can be one that is snugly positioned relative to one another so that the resulting siding assembly is resistant to cupping, separation and wind permeation.

FIG. 19 is presented with the siding layer of one insulated siding panel removed to demonstrate how the projecting edge of the abutting insulated siding member is received in the mating detent. As depicted in FIG. 20, the projecting siding edge 126 is received and positioned neatly relative to the associated detent 128. The upper edge configuration 129 is depicted in FIG. 21.

Rear panel configurations of abutting insulated siding panel members are depicted in FIGS. 22 and 23. Where desired or required, the rear panel configurations can be positioned such that the rear configurations correspond or cooperate as desired or required. It is contemplated that the lower edge of the respective siding layers can be configured to receive one another in overlapping relationship as depicted in FIG. 23.

Insulated siding panels can be installed in abutting top-to-bottom relationship as depicted in FIGS. 24 and 25A, B where the lip formed proximate to the top of one siding layer engages the lip configured in the lower edge of an associated siding panel. The upper most edge of one insulated siding panel projects upward into the detent 150 formed in the abutting insulated siding panel member.

In various alternate embodiments it is contemplated that the shape molded backing member may be prepared in lengths greater than four feet, with lengths as great as 20 feet being contemplated. The shape molded backing member 112 can be attached to the siding layer 114 at any time prior to installation on the wall. It is contemplated that, where desired or required, the siding layer can be attached to the backing member at the factory or in the field.

While the invention has been described in connection with what is presently considered to be the most practical and preferred embodiments, it is understood that the invention is not limited to the disclosed embodiments, but is intended to cover various modifications and equivalent arrangements included within the spirit and scope of the claims. The claims are to be accorded the broadest possible interpretation so as to encompass all such modifications and equivalent structures and instructions as permitted under the law.

What is claimed is:

1. A panel for mounting on a wall comprising:

a shape-molded backing member composed of closed cell expanded foam having a rear face and an opposed front face having at least one shape-molded contour defined therein the shape-molded backing member having an

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outer surface composed of a tough smooth skin and having a top edge, a bottom edge, a first side edge and a second side edge; and

a vinyl siding member in overlying relationship with the front face of the shape-molded backing member and having an overhang extending beyond at least one of the first and second side edges;

wherein the front face comprises a vertical detent along at least one of the first and second side edges of the front face, the vertical detent configured to receive the overhang of the vinyl siding member of an adjacent panel member;

wherein the vertical detent runs from the bottom edge of the backing member to a distance short of the top edge of the backing member, and wherein the overhang of the vinyl siding member runs from a bottom edge of the vinyl siding member to a distance short of the top edge of the vinyl siding member.

2. The panel member of claim 1, wherein the shape-molded backing member has a thickness between ¼ inch and 4 inches.

3. The panel member of claim 1, wherein the at least one shape-molded contour comprises at least one shoulder, a planar region extending from a depressed edge of the at least one shoulder, and an outwardly extending region extending from the planar region opposite the shoulder, the shape-molded contour having the tough, smooth skin.

4. The panel member of claim 1, wherein the vinyl siding member has a thickness between 0.020 and 0.036 inches inclusive.

5. The panel member of claim 1, further comprising an adhesive layer interposed between at least a portion of the front face of the backing member and the vinyl siding member, wherein the adhesive is continuously flexible, non-latex adhesive.

6. The panel member of claim 1, wherein the shape-molded backing member comprises a plurality of regions within the backing member, each region having a different density of closed cell expanded foam, the region configured to provide structural integrity and support to a resulting siding panel through different densities.

7. The panel member of claim 1, wherein the shape-molded backing member further includes opposing side faces contiguously positioned between the front and rear faces, at least one of the side faces having the tough smooth skin.

8. The panel member of claim 1, wherein the front face of the shape-molded backing member proximate the top edge includes at least one outwardly projecting lip member comprised of shape-molded foam and extending away from the wall beyond an upper edge of the vinyl siding member.

9. The panel member of claim 1, wherein the shape-molded backing member further includes at least one upper face and one lower face contiguously positioned between the front and rear faces, one or both of the upper face and lower face having a tough smooth surface.

10. The panel member of claim 8, wherein the rear face comprises a lateral relief spanning the width of the rear surface along the bottom edge of the rear face of the backing member, the lateral relief configured to be in overlying relationship with the outwardly projecting lip member of an adjacent shape molded backing member.

11. The panel member of claim 1, wherein the rear face of the shape-molded backing member includes at least one lateral relief defined proximate the bottom edge along the width, the lateral relief configured to receive a projecting lip of an adjacent vinyl siding member.